

SIZE 731		Wheel diameter: 73"				Fan outlet area: 55.2 sq. ft.				Class 1 = 555 RPM											
		Wheel circumference: 19.1'				Maximum BHP = 860 $\left(\frac{\text{RPM}}{1000}\right)^3$				Class 2 = 725 RPM											
		Class 3 = 915 RPM																			
CFM	OV	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		8"SP		10"SP		12"SP		14"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
80000	1449	273	16.8	342	31.4	408	48.5	467	68.0	524	90.5	574	114	661	164	743	221	812	278	874	337
93000	1685	296	21.0	356	36.7	414	54.7	471	75.2	524	97.5	574	122	664	177	741	234	812	296	877	361
106000	1920	324	26.4	374	43.2	427	62.6	478	83.5	526	106	574	131	660	186	741	248	811	313	875	379
119000	2156	354	33.1	395	50.6	443	71.2	490	93.5	534	117	579	143	664	200	742	263	811	330	876	401
132000	2391	384	41.2	420	59.5	462	81.0	505	105	546	129	586	155	667	214	740	276	809	344	874	419
145000	2627	414	50.3	447	70.3	483	92.6	523	118	561	143	598	170	671	228	745	295	810	363	873	437
158000	2862	444	60.6	476	82.6	507	105	542	131	579	159	613	187	683	249	750	314	813	383	877	461
171000	3098	471	71.2	506	96.7	533	120	564	147	598	175	630	205	694	267	759	337	821	410	881	487
184000	3333	486	78.3	537	113	562	138	588	165	619	194	650	225	711	292	770	361	829	436	885	512
197000	3569	516	91.9	567	131	591	157	615	185	642	215	671	248	728	316	782	386	838	463	894	545
210000	3804	547	108	597	150	622	179	643	207	666	238	692	271	747	342	801	418	852	496	903	577
223000	4040	579	127	626	170	652	202	673	233	693	264	716	297	767	371	817	447	868	530	915	611
236000	4275	612	148	654	192	682	229	702	260	722	293	742	326	788	401	836	479	883	562		
249000	4511	645	171	677	211	712	256	733	291	751	324	769	359	811	435	857	517	901	600		
262000	4746	677	197	692	225	742	287	764	324	781	360	798	395	835	471	877	553				
275000	4982	710	225	721	252	771	318	794	359	811	396	828	433	862	510	901	596				

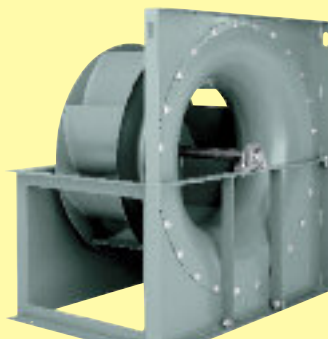
Performance certified is for installation Type B: Free inlet, Ducted outlet. Power rating [BHP] does not include transmission losses. Performance ratings do not include the effects of appurtenances [accessories].

MATERIAL SPECIFICATIONS

Dimensions in inches. Weights in pounds. WR² in lb.-ft.².

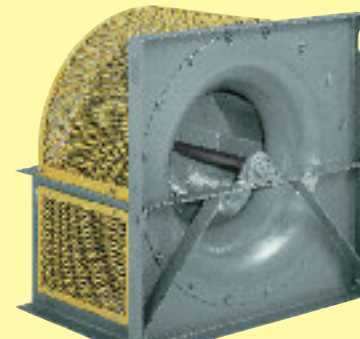
Size	Shaft diameter						Bearings			Drive key [square]			Wheel WR ² [lb.-ft. ²]			Bare fan weight [lbs.]		
	Class 1		Class 2		Class 3		Class	Class	Class	Class	Class	Class	Class	Class	Class	Class	Class	
	Wheel	Bearing	Wheel	Bearing	Wheel	Bearing	1	2	3	1	2	3	1	2	3	1	2	3
101	—	—	1	1	—	—	—	A	—	—	1/4	—	—	0.8	—	—	65	—
121	—	—	1 3/16	1 3/16	—	—	—	A	—	—	1/4	—	—	1.8	—	—	90	—
131	—	—	1 7/16	1 7/16	—	—	—	A	—	—	3/8	—	—	2.8	—	—	114	—
151	—	—	1 7/16	1 7/16	—	—	—	A	—	—	3/8	—	—	3.8	—	—	144	—
161	—	—	1 11/16	1 11/16	—	—	—	A	—	—	3/8	—	—	12	—	—	197	—
181	1 11/16	1 11/16	1 15/16	1 15/16	2 3/16	2 3/16	H	H	E	3/8	1/2	1/2	19	19	22	265	275	440
201	1 11/16	1 11/16	1 15/16	1 15/16	2 7/16	2 7/16	H	H	E	3/8	1/2	5/8	28	28	35	292	306	510
221	1 15/16	1 15/16	2 3/16	2 3/16	2 7/16	2 7/16	H	H	E	1/2	1/2	5/8	40	40	48	360	375	590
241	2 3/16	2 3/16	2 7/16	2 7/16	2 15/16	2 3/16	H	H	F	1/2	5/8	1/2	64	64	81	460	475	845
271	2 3/16	2 3/16	2 7/16	2 7/16	2 15/16	2 3/16	A	C	F	1/2	5/8	1/2	93	93	115	530	575	880
301	2 7/16	2 7/16	2 11/16	1 15/16	3 7/16	2 7/16	A	F	F	5/8	1/2	5/8	149	149	179	790	835	1065
331	2 7/16	2 7/16	2 15/16	2 3/16	3 7/16	2 7/16	A	F	F	5/8	1/2	5/8	219	220	251	925	1000	1325
361	2 11/16	2 11/16	2 15/16	2 3/16	3 15/16	2 11/16	A	F	F	5/8	1/2	5/8	363	363	417	1180	1225	2200
401	2 15/16	2 15/16	3 7/16	2 7/16	3 15/16	2 11/16	A	F	F	3/4	5/8	5/8	534	535	605	1345	1445	2350
441	3 7/16	2 7/16	3 15/16	2 11/16	4 7/16	2 15/16	F	F	F	5/8	5/8	3/4	872	874	1102	1730	1840	2750
491	3 7/16	2 11/16	4 7/16	2 15/16	4 15/16	3 7/16	F	F	F	5/8	3/4	7/8	1356	1406	2032	2205	2380	3350
541	3 15/16	2 15/16	4 7/16	3 7/16	5 7/16	3 15/16	F	F	F	3/4	7/8	1	2019	2096	3230	2820	2955	4300
601	3 15/16	2 15/16	4 15/16	3 7/16	5 7/16	4 7/16	F	F	F*	3/4	7/8	1	3068	3189	4756	3550	3855	4540
661	4 7/16	3 7/16	5 7/16	3 15/16	6	4 7/16	F	F	F*	7/8	1	1	5821	6008	7985	4585	4980	6960
731	4 15/16	3 15/16	6	3 15/16	6 1/2	4 15/16	F	F	F*	1	1	1 1/4	9374	9627	12918	7155	7465	10000

Shafting: AISI 1040 turned, ground, polished and straightened. Bearing types: A—Link-Belt P3-U200. C—Sealmaster SPM. E—Link-Belt P-U300. F—Link-Belt P-B22400. F*—Link-Belt P-B22500. H—Dodge GTAH Grip-Tight. **nyb** reserves the right to substitute bearings of equal ratings.



PLENUM FANS

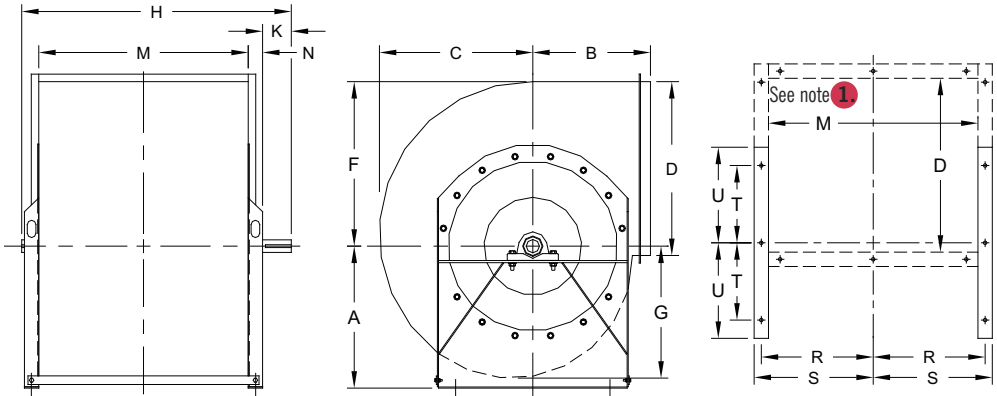
Unhoused, single-width, Plenum Fans are available for airflows to 150,000 CFM and pressures to 12" WG. Nineteen sizes are offered from 12" to 73" wheel diameters. Designs include belt and direct-drive arrangements.



DIMENSIONS

ROTATABLE FANS

Dimensions should not be used for construction unless certified.



DIMENSIONS [INCHES]

Size	A			B*		C	D	F	G	H			K		M
	Class 1, 2		Class 3	▲	TAD					Class 1	Class 2	Class 3	Class 1, 2	Class 3	
	TH, TAD, DB	BH, UB, TAU, BAU													
101	9½	11¼	—	8½	8½	11⅞	11⅞	10⅝	8½	—	21¼	—	3	—	13⅝
121	11	13¾	—	10	10	13⅝	13⅝	13	10⅜	—	24¼	—	3	—	16⅝
131	12	15	—	11	11	15⅞	15⅞	14¼	11⅜	—	26½	—	3	—	18¾
151	14	16¾	—	12	12	16¾	16¾	15⅞	12⅝	—	28½	—	3½	—	20¼
161	14¾	18½	—	13	13	18½	18½	17½	14	—	30½	—	3½	—	22¼
181	16¼	20¼	21¼	14	14	20½	20½	19⅜	15½	34¼	34¼	37	3½	4	24¾
201	17¾	22¼	23¼	15½	15½	22½	22½	21⅜	17	37	37	40	4	4½	27
221	19¾	24½	25½	17	17	24⅞	24⅞	23⅝	18⅞	40⅞	40⅞	43	4	4½	30⅞
241	21½	26¾	28	19	19	27⅜	27⅜	26	20¾	44¾	44¾	47	4½	5	33¼
271	23¾	29½	30½	20½	20½	30¼	30¼	28⅝	22⅞	48½	48½	50½	5	5½	36½
301	26¼+	33	33¾	22½†	33	30⅜	33½	31⅞	25⅜	53	53	55½	5½	6	40½
331	28¾+	36	37	24½†	36	33⅜	36⅞	35	28	57½	57½	60	6	6½	44⅝
361	31¼+	40	—	29†	40½	36⅞	40¾	38¾	30⅞	62¾	62¾	—	6½	—	49¼

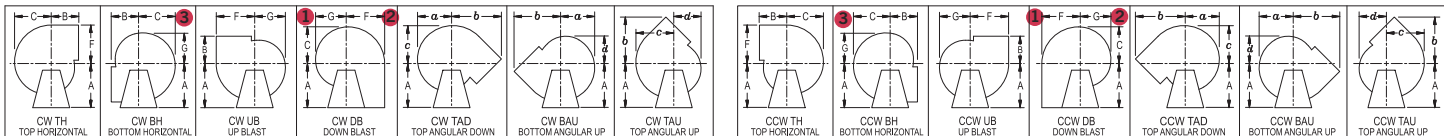
* For DB Discharge on Class 1 and 2 fans sizes 101-271, use A dimension for B. + For DB Discharge on Class 1 and 2 fans sizes 301-361, use B dimension for A.
† Use TAD dimension for Class 1 and 2 TAU and BAU discharge fans. ▲ TH, BH, UB, DB, BAU, TAU discharges. D and M are outside dimensions.

Size	N		R		S		T	U		a	b◇	c	d	Base holes
	Class 1, 2	Class 3	Class 1, 2	Class 3	Class 1, 2	Class 3		Class 1, 2	Class 3					
101	2¼	—	7⅞	—	8¾	—	4⅝	6⅝	—	9½	13⅝	10½	7⅝	⅑/16
121	2¼	—	9⅜	—	10¼	—	5⅞	8	—	11⅝	16¼	12⅞	9¼	⅑/16
131	2¼	—	10¾	—	11⅝	—	6⅝	8¾	—	12¾	17⅞	14	10¼	⅑/16
151	2¼	—	11½	—	12⅜	—	7½	9⅝	—	14⅞	19¾	15¾	11⅜	⅑/16
161	2¼	—	12½	—	13⅜	—	8½	10½	—	15½	21⅝	17¼	12½	⅑/16
181	2¾	4⅞	14	14⅞	15⅞	15⅝	9⅞	11⅝	10⅞	17¼	23⅝	19⅞	13⅞	⅑/16
201	2¾	4⅞	15⅞	15¼	16¼	16¾	10⅞	12⅞	11¾	19	26½	21⅞	15¼	⅑/16
221	2¾	4⅞	16¾	16⅞	17⅞	18⅜	10⅞	13⅞	12⅝	21	28¾	23¼	16¾	⅑/16
241	3¼	4⅞	18¼	18⅞	19⅜	20⅞	12¼	15½	14⅜	23⅞	31⅞	25⅝	18½	¾
271	3¼	4⅞	20¼	20½	21½	22½	13⅝	16⅞	15½	25⅞	34¾	28¼	20⅞	¾
301	3¼	4¼	22½	22½	23½	24½	14⅞	19	16⅞	28¼	38⅜	31⅜	22⅝	¾
331	3¼	4¼	24¼	24⅝	25⅝	26⅝	16	20⅝	18¼	31⅞	42⅞	34⅝	25¼	¾
361	3¼	—	26½	—	27⅞	—	17½	22⅞	—	34⅞	45⅞	38¼	27½	⅞

◇ For Size 30 and 33, Class 3 fans, dimensions for BAU or TAU discharge are 38½" and 42½", respectively.

Tolerance: ± 1/8"

FAN DISCHARGES – VIEWED FROM DRIVE SIDE



Clockwise—angular discharges at 45°

Counterclockwise—angular discharges at 45°

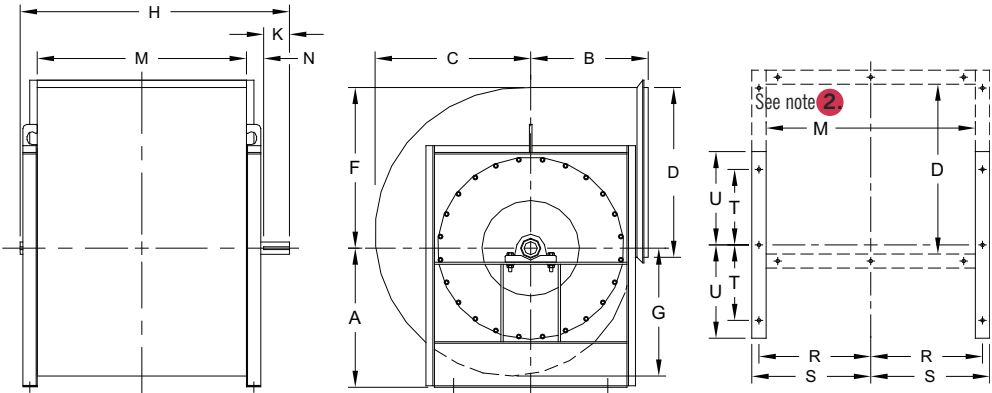
- 1. Discharge is framed at floorline on Class 1 and 2 Down Blast fans.
- 2. Discharge is framed at floorline on Class 3, Sizes 36-73 Down Blast fans. Class 3, Sizes 18-33 Down Blast fans are furnished standard with slip connection above floorline.
- 3. On Class 1 and 2 fans with Bottom Horizontal discharge and optional flanged outlet, the flange extends below the base bars of the fan.

The New York Blower Company has a policy of continuous product development and reserves the right to change designs and specifications without notice.

DIMENSIONS

Non-ROTATABLE FANS

Dimensions should not be used for construction unless certified.



DIMENSIONS [INCHES]

Size	A†					B		C	D	F	G	H		K	
	Class 1, 2		Class 3			▲	TAD					Class 1, 2	Class 3	Class 1, 2	Class 3
	TH, TAD	BH, UB, TAU, BAU	TH, TAD	BH, BAU	UB, TAU										
361	—	—	33	42	39	29	40½	367⁄8	40¾	38¾	307⁄8	—	67¼	—	7
401	35	44	36	46	43	31	45¼	40¾	447⁄8	42¾	34½	68¼	73	7	7½
441	38½	48¼	40	50	47	33½	49½	45	495⁄8	47½	37¾	74½	79	7½	8
491	42½	53½	43½	55	51½	36	54	49½	545⁄8	52	41½	83	86	8	8½
541	47	59	48	60½	57	40	60	547⁄8	603⁄8	57½	457⁄8	90½	94½	8½	9
601	52	65¼	53	66½	62½	43	66	60¾	667⁄8	63¾	507⁄8	98½	103¼	9	9½
661	57	71½	58	73	69	47	70¼	66¾	73½	70	56	107¼	111¾	9½	10
731	63	79	64	80½	76	51½	76½	737⁄8	81¼	77½	617⁄8	117	123¼	10	10½

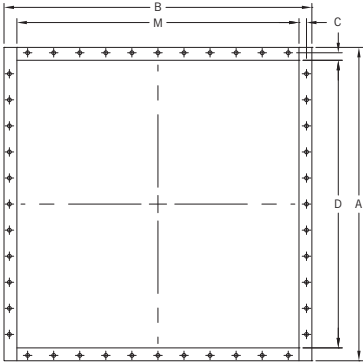
† On DB discharge, use B for A. ▲ TH, BH, UB, DB, BAU, TAU discharges. D and M are outside housing dimensions.

Size	M	N		R		S		T	U		a	b		c	d	Base holes
		Class 1, 2	Class 3	Class 1, 2	Class 3	Class 1, 2	Class 3		Class 1, 2	Class 3		BAU, TAU	TAD			
		361	49¼	—	53⁄8	—	261⁄8		—	275⁄8		17½	—			
401	543⁄8	3¼	53⁄8	28¾	28¾	30¼	30¼	19	25½	26¼	38	52½	62¼	42½	30	7⁄8
441	60	3¼	53⁄8	31½	31½	33	33	21	28	28¾	42	57	683⁄8	46½	335⁄8	7⁄8
491	661⁄8	41⁄8	5½	345⁄8	345⁄8	361⁄8	361⁄8	23	32½	31¼	461⁄8	62¼	75	51¼	36½	7⁄8
541	731⁄8	41⁄8	57⁄8	385⁄8	385⁄8	405⁄8	405⁄8	25	36¼	35	511⁄8	69	831⁄8	56¾	41	1
601	80¾	41⁄8	6¼	423⁄8	423⁄8	443⁄8	443⁄8	26½	39¾	38½	565⁄8	75½	915⁄8	617⁄8	453⁄8	1
661	887⁄8	41⁄8	6¼	46½	47	48½	49½	29	43	42¼	62¼	82¾	991⁄8	691⁄8	497⁄8	1
731	98¼	41⁄8	7	511⁄8	515⁄8	531⁄8	541⁄8	33½	47	46¼	687⁄8	91¼	1087⁄8	763⁄8	551⁄8	1

Tolerance: ± 1/8"

FLANGED OUTLET OPTION

- Mounted flush with outside edge of housing discharge.
- Holes furnished on 4" centers from centerlines.
- M and D dimensions are inside flange, outside housing.
- Down Blast fans with optional flanged outlet are only offered in Class 3.
- Tolerance: ± 1/8".



DIMENSIONS [INCHES]

Size	A	B	C	D	M	Hole dia.
101	131⁄8	155⁄8	5⁄8	111⁄8	135⁄8	5⁄16
121	155⁄8	185⁄8	5⁄8	135⁄8	165⁄8	5⁄16
131	171⁄8	20¾	5⁄8	151⁄8	18¾	5⁄16
151	18¾	22¼	5⁄8	16¾	20¼	5⁄16
161	21	24¾	3⁄4	18½	22¼	7⁄16
181	23	27¼	3⁄4	20½	24¾	7⁄16
201	25	29½	3⁄4	22½	27	7⁄16
221	273⁄8	325⁄8	3⁄4	247⁄8	301⁄8	7⁄16
241	303⁄8	36¼	7⁄8	273⁄8	33¼	7⁄16
271	33¼	39½	7⁄8	30¼	36½	7⁄16
301	36½	43½	7⁄8	33½	40½	7⁄16
331	397⁄8	475⁄8	7⁄8	367⁄8	445⁄8	7⁄16
361	44¾	53¼	11⁄8	40¾	49¼	9⁄16
401	487⁄8	583⁄8	11⁄8	447⁄8	543⁄8	9⁄16
441	535⁄8	64	11⁄8	495⁄8	60	9⁄16
491	585⁄8	701⁄8	11⁄8	545⁄8	661⁄8	9⁄16
541	643⁄8	771⁄8	11⁄8	603⁄8	731⁄8	9⁄16
601	707⁄8	84¾	11⁄8	667⁄8	80¾	9⁄16
661	77½	927⁄8	11⁄8	73½	887⁄8	9⁄16
731	85¼	102¼	11⁄8	81¼	98¼	9⁄16